We Claim:

1. An optical lens for projecting light from a high power light emitting diode, the lens including a body having a front face and a rear face and a continuous curved side wall which is symmetrical with respect to a central axis of the body extending between said rear face and said front face, a cavity extending into said rear face of said body coaxially aligned with said central axis of said body for cooperatively receiving a hemispherical cover of a high power light emitting diode source therein so that substantially all light from the high power light emitting diode source enters into said body, and an inner surface of said side walls being reflective and configured such that light from the high power light emitting diode source is projected through said front face in a lambertion pattern.

2. The optical lens of claim 1 wherein said inner surface of said side walls is of a configuration such that light is projected from said front face of said lens at a beam angle of between 5° to 30° with respect to said central axis.

3. The optical lens of claim 1 in which said body includes at least one guide flange extending radially outwardly from said side wall relative to said central axis.

4. The optical lens of claim 3 including a counterbore in said rear face surrounding said cavity for cooperatively seating a portion of the high power light emitting diode therein.

5. The optical lens of claim 4 wherein said body includes an annular lip extending radially outward relative to said front face so as to extend beyond said side wall.

6. The optical lens of claim 5 in which said cavity includes a cylindrical refractive side wall and a planar end wall.

7. The optical lens of claim 6 in combination with a high power light emitting diode light source having a hemispherical lens of a size to be cooperatively received within said cavity.

8. The optical lens of claim 5 is which said cavity includes a refractive cylindrical side wall and a convex end wall.

9. The optical lens of claim 8 in combination with a high power light emitting diode light source having a hemispherical lens of a size to be cooperatively received within said cavity.

10. The optical lens of claim 5 in combination with a lens holder, said lens holder including an annular front portion and a rear portion and defining a central cavity for selectively receiving the optical lens therein, a heat sink assembly mounted within said central cavity, a high power light emitting diode light source mounted in heat conducting relationship to said heat sink, and at least one guide channel formed within said holder for cooperatively receiving said at least one guide flange therein to thereby prevent rotational displacement of said body of said lens relative to said high power light emitting diode when said body is inserted within said central cavity of said lens holder.

11. The optical lens and combination lens holder of claim 10 wherein said annular lip is of a configuration to engage said annular front portion of said lens holder, and a closure member for securing said lip to said annular front portion of said holder to thereby retain said body within said central cavity of said lens holder.

12. The optical lens and combination lens holder of claim 10 wherein said heat sink assembly includes tap means for dissipating heat by convection through a side wall of said lens holder.

13. The optical lens and combination lens holder of claim 10 wherein said heat sink assembly includes a first heat sink member having a base mounted in heat exchange relationship relative to said high power light emitting diode and a plurality of fingers extending within said central cavity and about said lens.

14. The optical lens and combination lens holder of claim 13 in which said heat sink assembly includes a second heat sink member mounted in heat exchange relationship relative to said first heat sink member and said high power light emitting diode, and a tap means extending from said second heat sink member through a side wall of said lens holder.

15. An optical lens for projecting light from a high power light emitting diode, the lens including a body having a front face and a rear face and a continuous curved side wall which is symmetrical with respect to a central axis of said body extending between said rear face and said front face, a cavity extending into said rear face of said body coaxially aligned with said central axis of said body for cooperatively receiving a hemispherical high power light emitting diode source therein so that substantially all light from the high power light emitting diode source enters into said body, an inner surface of said side walls being reflective and

configured such that light from the high power light emitting diode source is projected through said front face and said body including at least one guide flange extending radially outwardly from said side wall relative to said central axis.

16. The optical lens of claim 15 wherein said body includes an annular lip extending radially outward relative to said front face so as to extend beyond said side wall.

17. The optical lens of claim 16 wherein said inner surface of said side walls is of a configuration such that light is projected from said front face of said lens in a lambertion pattern at a beam angle of between 5° to 30° with respect to said central axis.

18. The optical lens of claim 15 including a counterbore in said rear face surrounding said cavity for cooperatively seating a body of the high power light emitting diode.

19. An optical lens system comprising an optical lens for projecting light from a high power light emitting diode, said lens including a body having a front face and a rear face and a continuous curved side wall which is symmetrical with respect to a central axis of said body extending between said rear face and said front face, a cavity extending into said

rear face of said body coaxially aligned with said central axis of said body for cooperatively receiving a hemispherical high power light emitting diode source therein so that substantially all light from the high energy light emitting diode source enters into said body, an inner surface of said side walls being reflective and configured such that light from the high power light emitting diode source is projected through said front face, said body further including at least one guide flange extending radially outwardly from said side wall relative to said central axis, an annular lip extending radially outwardly relative to said front face of said body so as to extend beyond said side wall, a lens holder including a front annular end and a rear portion and defining an internal cavity for cooperatively receiving said body, heat sink means for dissipating heat from the high power light emitting diode mounted within said internal cavity of said lens holder, a high power light emitting diode mounted to said heat sink, at least one guide means within said lens holder for cooperating with said at least one guide flange for preventing rotational movement of said body when said body is within said internal cavity of said lens holder, and a closure member for selectively securing said annular lip of said body to retain said body within said internal cavity of said lens holder.

20. The optical lens system of claim 19 further including an

outer housing of a size to receive said lens holder therein.